Outline
Puget Sound Partnership Strategic Science Plan
Draft 2.0: 24 March 2008

I. Introduction (why)
This section will lay the context of this plan, the history, responsibilities, and goals of this effort. It should also cover why things have not worked in the past.

A. Context and history

B. Overall Science Plan Goals

1. Ensure that science is an integral part of all PSP activities and as PSP evolves.
2. Identify and prioritize the information and components required to meet PSP goals objectives successfully.

C. Findings

II. Guiding Principles (overall how)
This section defines our overall philosophy, and will include lessons learned from other programs.

A. Need for sustained investment in the science of Puget Sound

There is need to stimulate both the:

1. Incorporation of existing scientific knowledge into Action Agenda and management/policy
2. Derivation of new scientific knowledge on Puget Sound

B. Need for sustained investment in the process of adaptive management, a process where science and policy work in concert to define and achieve the goals of the Puget Sound Partnership.

1. Science program needs to initially define and then continually refine broad PSP goals (6 major goals) into measurable elements, consistent with ecosystem model(s) and changing environmental baselines and policy goals.
2. Program needs to address accountability in the application of science to meeting PSP goals (e.g., compliance with regulatory standards or laws (e.g., clean water act, HPAs), with application of guidance in GMA and SMA).
3. Program needs to identify and address how science information is currently used and how new science will be used in meeting PSP goals (i.e., what policy decisions are contingent on more or better science and why). This should lead to doing more relevant science and is part of adaptive management.

4. Program needs to explicitly link new science (data) needs with new expected policy actions as much as possible (this is also part of the adaptive management loop).
5. Program should facilitate the development of coordinated scientific roles for agencies relative to the action agenda. Part of creating a science program may include understanding how major science players collect data to manage public resources and how they might be leveraged to change how they collect data to answer broader questions useful to all stakeholders.
6. Program needs to ensure accountability for monitoring, research and modeling that PSP funds (either directly or through the actions of other agencies/institutions/governments).

C. Recap any content from the "desired characteristics" from our SP discussion
D. Ensure PS science community is engaged
E. Ensure process is transparent to public

III. PS Partnership goals and the needed scientific objectives to achieve those (what we need to know)

A. State each of the six PSP Goals (WQ, WQnt; Habitat, Species, HWB, HH)
1. Objectives: State the science and sci-policy interface knowledge needs (including regulatory shortfalls) that are required to achieve a given goal.
a. For each Goal, evaluate the adequacy* of current scientific information and/or new research/analyses needed to achieve the goal.
b. For each Goal, evaluate the adequacy* of current institutional governmental structure, incentive and regulatory structure and/or new strategies needed to achieve the goal.
*Be sure to consider the "adequacy" in light of Findings (e.g., climate and population changes), scenario testing/alternative futures analysis and what current knowledge limitations to conducting those analyses are.
c. For each Goal, should consider where most pay-off can be achieved.
d. For each Goal, should address ID of Benchmarks (has it been done?, is more work needed?, etc.)

IV. Components of the Science Plan (what & how/where)
This section defines the component parts of the strategic science plan that will enable a scientific understanding and incorporation of such into the regional management and planning process. It also defines how the components and programs described above will be functionally organized.

A. Monitoring (follow-up from SP discussion)
B. Research
C. Modeling

D. Data management
E. Facilities
F. Arenas for communication to science, management and interested communities

V. Input to adaptive management

This section explicitly describes how the adaptive management process will be assured of science input.

A. Identify explicitly how to get science input into issues and vice versa.
B. Input to Adaptive Management will be a program that the PSP SP develops with the ECB and will be distributed. It will identify sources of existing knowledge and link these to relevant management constructs.
C. Includes assessment of compliance with existing laws, (where low enforceability precludes compliance, etc. While this may not be SP's responsibility directly, it should be noted by SP that this is critical part of applying science, and indicators may be useless without addressing this.

VI. Science Education and Outreach Plan

(Trina, Usha, Jan to meet with Bergman and WSU/UW for coordination)

For education, this section defines essential programs that assure focus on Puget Sound science continues to the next generation of scientists, to the youth in the region, and to all of the residents and general public. For outreach, this section defines major pathways for how information is communicated to wider audiences.

A. PSP Fellowship Program: a program that funds both graduate and post-doctoral research of direct relevance to the PSP. Have a competitive program and evaluation of proposed work.
B. K-12 educational programs: a program leveraging the Marine Facilities in each of the Action Areas to connect with regional schools to visit the facility, understand issues of high priority to the region and be a centerpost for Puget Sound/marine environmental curricula that may be shared.
C. Public Outreach:
    1. Programs within each of the Action Areas at the Marine Facilities to engage the public on local issues and general understanding. Involve public through hands-on activities and demos from the Fellows and other scientists.
    2. Website section
    3. Newsletters? (2x/year?)

VII. Peer Review (how)

This section defines an essential aspect of any scientific strategy, how scientific information is reviewed for accuracy prior to publication and dissemination to a wider audience. This element has several aspects.

A. Peer review of scientific results from funded research: conducted either from journal submission or other process provided by PSP

B. Peer review of proposals for evaluation for funding: recommend using existing functionary such as Washington Sea Grant or WSU Extension, etc.
C. Peer review of science messages from the PSP: conducted by the Science Panel. Messages from PSP that involve scientific perspectives will be reviewed by the Science Panel for accuracy.
A. Communication to science community:
1. Peer reviewed publications from any PSP funded research

VIII. Input to Action Agenda
This section defines explicitly what the science plan input is to the Action Agenda.